



## Fact Sheet

Re-Authorization for Discharges from Richland County, the Town of Arcadia Lakes and the City of Forest Acres under SC National Pollutant Discharge Elimination System (NPDES) Phase I Medium MS4 Permit SCS400001  
Public Notice 15-940-R

### **Introduction:**

This fact sheet has been prepared by the South Carolina Department of Health and Environmental Control (DHEC or the Department) to set forth the principal facts involved in re-authorizing discharges from the regulated small Municipal Separate Storm Sewer Systems (small MS4) located in the Town of Arcadia Lakes and in the City of Forest Acres and from the medium MS4 located in Richland County under the SC NPDES Phase I Permit for Storm Water Discharges, SCS400001 as described in Public Notice 15-940-R.

These regulated MS4 are conveyances or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned or operated by the Town of Arcadia Lakes, the City of Forest Acres and Richland County. These entities have jurisdiction over the disposal of storm water under State and local law. Discharges from the entire geo-political-jurisdictional boundaries of the Town of Arcadia Lakes and the City of Forest Acres and from unincorporated areas in Richland County are authorized under this permit.

NPDES Storm Water Permit SCS400001 authorizes discharges composed entirely of storm water as defined in Section 402(p) of the Clean Water Act (CWA), SC Water Pollution Control Permits Regulation 61-9 and the permit itself. The Department has made a preliminary determination that re-authorizations of these storm water discharges under SCS400001 is necessary to important economical or social development and that it will allow for maintenance of existing water uses.

DHEC has been delegated authority by EPA to implement the NPDES program within the state of South Carolina, including on Indian Lands. DHEC issued the NPDES Storm Water Permit for Discharges from the Town of Arcadia Lakes, the City of Forest Acres and Richland County MS4, SCS400001, effective on September 11, 2006. This permit expired on September 10, 2011.

### **Background:**

In 1987, the US Congress amended the Federal Clean Water Act to require EPA to implement an NPDES Stormwater Permit Program for municipal discharges. EPA was directed to develop a phased regulatory program for municipal type discharges. The municipal program includes counties as well as towns and cities. Based on these amendments, EPA promulgated the Phase I Stormwater NPDES Regulations in 1990 to address municipal separate storm sewer systems (MS4). The Phase I regulations categorized MS4 as follows:

- Large MS4 - entities with a population of 250,000 or more.
- Medium MS4 - entities with a population of 100,000 or more but less than 250,000.

Phase I Federal Regulations required NPDES Permits for stormwater discharges from the Large and Medium MS4. SC has one large MS4 (SC Department of Transportation) and three Medium MS4: City of Columbia, Greenville County, and Richland County. Each of these entities has been issued an individual NPDES Permit.

EPA promulgated Phase II Stormwater NPDES Regulations next, in 1999. This set of regulations established application and permit requirements for Small MS4. These regulations have been promulgated into South Carolina Water Pollution Control Permits Regulation 61-9 under §122.26(a)(9) and §122.26(b)(16).

The Small MS4 term refers to all conveyances, or systems of conveyances, (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) designed or used for collecting or conveying storm water that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the States, but is not defined as “large” or “medium” municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

### **Permit Requirements:**

The draft permit requires the Town of Arcadia Lakes, City of Forest Acres and Richland County to continue the development, implementation and enforcement of a Storm Water Management Program (SWMP). MS4 operators must include in their SWMP measures to effectively prohibit non-storm water discharges to their system; implementation of controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), to protect water quality; and implementation of best management practices (BMP), control techniques, or system design and engineering methods to satisfy appropriate requirements of the CWA. The SWMP includes the following ten elements:

1. Structural Controls and Storm Water Collection System Operation
2. Areas of New development and Redevelopment
3. Existing Roadways;
4. Flood Control Projects;
5. Municipal Facilities;
6. Application of Pesticide, Herbicide and Fertilizers (PHF);
7. Illicit Discharges and Improper Disposal;
8. Industrial Runoff;
9. Construction site storm water runoff control; and,
10. Public education and Public Participation;

## **Water Quality Based Effluent Limitations (WQBEL):**

In addition to these elements, the permit contains Water Quality Based Effluent Limitations (WQBEL) applicable to permitted Storm Water Discharges to Impaired and to Sensitive Waters. These WQBEL are applicable to TMDL watersheds, Impaired Water Quality Monitoring Stations (WQMS), and to Sensitive Waters classified Outstanding National Resource Waters (ONRW), Outstanding Resource Waters (ORW), Trout Put, Grow And Take (TPGT) and Source Water Protection Areas (SWPA), including groundwater protection areas. Attainment of intended uses and maintenance of water quality standards must be documented every annual report. Progress on WQBEL implementation and pollutant reductions must be included in every annual report as well.

For TMDL watersheds and impaired WQMS, WQBEL are necessary to achieve water quality standards (WQS) under section 303 of the CWA. WQBEL in the draft permit addresses the reasonable potential for discharges to be permitted by establishing procedures to account for control measures on point and nonpoint sources of the pollutant of concern, POC. Compliance with the WQBEL will result in controls on the POC that are sufficient to attain and maintain applicable WQS. WQBEL developed to protect water quality criteria in TMDL watersheds are consistent with the assumptions and requirements of available wasteload allocations, WLA, for the discharge. These WLA, as stated in approved TMDL are listed below.

### **1. Twentyfive Mile Creek FC TMDL:**

[http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl\\_25mile\\_fc.pdf](http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl_25mile_fc.pdf)

**CW-080 (MS4s for Richland County, Kershaw County and City of Elgin)**

“Several small areas, which are contiguous with the City of Columbia, within the watershed have been designated as MS4s (Figure 4). These areas, parts of Richland and Kershaw Counties, have or will have NPDES MS4 (Municipal Separate Storm Sewer System) permits. These permitted sewer systems will be treated as point sources in the TMDL calculations below.”

Impaired Station	WLA MS4 % Reduction	LA cfu/day	MOS cfu/day	TMDL cfu/day	Target cfu/day	% Reduction
CW-080	71	1.51E+12	8.0E+10	1.59E+12	1.51E+12	71%

### **2. Spears and Kelly Creeks FC TMDL:**

[http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl\\_spearskelly\\_fc.pdf](http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl_spearskelly_fc.pdf)

**CW-154 and CW-166**

“Small parts of these watersheds, in the headwaters, have been designated as Municipal Separate Storm Sewer Systems or MS4s (Figure 7). Richland County has responsibility for a small area in the upper Spears Creek watershed. Kershaw County also has responsibility for a small MS4 area in the Kelly Creek watershed. These permitted sewer systems will be treated as point sources in the TMDL calculations below.”

Impaired Station	WLA MS4 % Reduction	LA cfu/day	MOS cfu/day	TMDL cfu/day	Target cfu/day
CW-154	65	7.47E+10	3.9E+09	7.9E+10	7.47E+10

Impaired Station	WLA MS4 % Reduction	LA cfu/day	MOS cfu/day	TMDL cfu/day	Target cfu/day
CW-166	61	2.57E+11	1.3E+10	2.7E+11	2.57E+11

**3. Cedars Creek FC TMDL: B-320**

<http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdlcedr.pdf>

There are 2 NPDES dischargers in the watershed, but no MS4. Located in Richland County.

**4. Lower Broad River FC TMDL: B-110, B-316, B-280, B-337**

[http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl\\_lwrbrd\\_fc.pdf](http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl_lwrbrd_fc.pdf)

The City of Columbia and Richland County have a Phase I MS4 permit and portions of B-110, B-337, B-316 and B-280 watersheds are covered under this permit.

<i>MS4 Entity</i>	<i>WQM Stations</i>	<i>% Reduction Goal</i>
<i>City of Columbia Richland County</i>	<i>B-110, B-280, B-316, B-337</i>	<i>99</i>

**5. Gills Creek FC TMDL: C-001, C-017**

[http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl\\_gills\\_fc.pdf](http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl_gills_fc.pdf)

The following additional jurisdictions are regulated MS4 entities within the Gills Creek watershed: Richland County, the City of Columbia, the Town of Arcadia Lakes, the City of Forest Acres, and the US Army/Fort Jackson (Figure 3-3). Of these jurisdictions, Richland County and the City of Columbia are designated Phase I MS4s. The Town of Arcadia Lakes and the City of Forest Acres are Phase II MS4s currently covered under the jurisdiction of the Richland County Phase I MS4 permit, and they will not be considered separate MS4 entities for the purposes of this TMDL document.

**Regulated MS4 Entity(ies) Currently Responsible for Meeting Percentage Reductions or WQS by Monitoring Station.**

<i>Station</i>	<i>WLA Reduction</i>	<i>Existing Regulated MS4 Entity(ies) in Watershed</i>
<i>C-001</i>	<i>97%</i>	<i>City of Arcadia Lakes SCS400001</i>
	<i>97%</i>	<i>City of Columbia SCS790001</i>
	<i>97%</i>	<i>City of Forest Acres SCS400001</i>
	<i>97%</i>	<i>Fort Jackson SCR037901</i>
	<i>97%</i>	<i>Richland County SCS400001</i>
	<i>97%</i>	<i>SC DOT SCS040001</i>
<i>C-017</i>	<i>91%</i>	<i>City of Columbia SCS790001</i>
	<i>91%</i>	<i>Richland County SCS400001</i>
	<i>91%</i>	<i>SC DOT SCS040001</i>

6. **Gills Creek DO TMDL: C-048, C-017 (Pollutants are BOD5 and Ammonia)**  
[http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl\\_gills%20 do.pdf](http://www.scdhec.gov/HomeAndEnvironment/Docs/tmdl_gills%20do.pdf)

The following jurisdictions are regulated MS4 entities within the Gills Creek watersheds: Richland County, the City of Columbia, the Town of Arcadia Lakes, the City of Forest Acres, and the U.S. Army/Fort Jackson (Figure 3-3). Of these jurisdictions, Richland County and the City of Columbia are designated Phase I MS4s. The Town of Arcadia Lakes and the City of Forest Acres are Phase II MS4s currently covered under the jurisdiction of the Richland County Phase I MS4 permit and are not considered separate MS4 entities for the purposes of this TMDL document.

**Regulated MS4 Entity(ies) Currently Responsible for  
Meeting Percentage Reductions or WQS by Monitoring Station.**

Station	BOD5 WLA Reduction	NH3 WLA Reduction	Existing Regulated MS4 Entity(ies) in Watershed
C-017	61%	22%	<i>City of Arcadia Lakes SCS400001</i>
	61%	22%	<i>City of Columbia SCS790001</i>
	61%	22%	<i>City of Forest Acres SCS400001</i>
	61%	22%	<i>Fort Jackson SCR037901</i>
	61%	22%	<i>Richland County SCS400001</i>
	61%	22%	<i>SC DOT SCS040001</i>
C-048	62%	55%	<i>Richland County SCS400001</i>
	62%	55%	<i>SC DOT SCS040001</i>

**Receiving Waters:**

The MS4 areas designated inside the geopolitical boundaries of Richland County include portions of 12 Digit Hydrologic Unit Codes (HUC-12) watersheds.

**Twelve-Digit Hydrologic Unit Codes, Watersheds and Basins in Richland County**

HUC_12 Code	Watershed	Basin
030501040205	Rice Creek *	Catawba
030501040206	Sandy Branch *	Catawba
030501040307	Wateree River	Catawba
030501040401	Upper Spears Creek *	Catawba
030501040402	Lower Spears Creek *	Catawba
030501040403	Upper Colonels Creek	Catawba
030501040404	Lower Colonels Creek	Catawba
030501040405	Robert Branch – Wateree River	Catawba
030501040406	Wateree River	Catawba
030501040407	Beech Creek – Wateree River	Catawba
030501060507	Lower Little River – Broad River	Broad
030501060601	Cedar Creek - Big Cedar Creek	Broad
030501060602	Little Cedar Creek – Big Cedar Creek	Broad
030501060603	Big Cedar Creek	Broad

<b>HUC_12 Code</b>	<b>Watershed</b>	<b>Basin</b>
030501060701	Crims Creek	Broad
030501060702	Wateree Creek	Broad
030501060703	Mayo Creek – Broad River	Broad
030501060704	Hollinshead Creek	Broad
030501060705	Beasley Creek	Broad
030501060706	Upper Crane Creek *	Broad
030501060707	Lower Crane Creek *	Broad
030501060708	Nicholas Creek – Broad River *	Broad
030501091310	High Hill Creek – Saluda River	Saluda
030501091403	Outlet Cedar Creek	Saluda
030501100201	Jackson Creek – Gills Creek *	Saluda
030501100202	Upper Gills Creek – Congaree River *	Saluda
030501100203	Lower Gills Creek – Congaree River *	Saluda
030501100301	Upper Congaree River	Saluda
030501100303	Middle Congaree River	Saluda
030501100304	Mill Creek – Congaree River	Saluda
030501100305	Myers Creek	Saluda
030501100306	Cedar Creek – Congaree River	Saluda
030501100307	Dry Branch	Saluda
030501100310	Lower Congaree River	Saluda
030501100401	Toms Creek	Saluda
030501100403	Toms Creek – Lower Congaree River *	Saluda
030501110109	Lake Marion – Santee River	Santee
(*) Watershed is inclusive of WLA applicable to MS4		

Streams receiving discharges from all of the permitted area in Richland County are classified as

- Class FW; freshwaters suitable for primary and secondary contact recreation; these waters are also suitable as a source of drinking water supply after conventional treatment in accordance with the requirements of the Department, for fishing, and, with the exception of Class ORW, for industrial and agricultural uses,
- Outstanding National Resource Waters (ONRW) are freshwaters or saltwaters which constitute an outstanding national recreational or ecological resource.
- Outstanding Resource Waters (ORW) are freshwaters or salt waters which constitute an outstanding recreational or ecological resource, or those freshwaters suitable as a source for drinking water supply purposes with treatment levels specified by the Department.
- Trout Put, Grow and Take (TPGT), are freshwaters suitable for supporting growth of stocked trout populations, suitable for primary and secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with the requirements of the Department and also suitable for fishing and suitable for industrial and agricultural uses.

All these waters are also suitable for the survival and propagation of a balanced indigenous aquatic community of marine fauna and flora (SC Water Classifications & Standards Regulation 61-68 G.4, 6, & 8.b, pp. 30 – 32). The Department has made a preliminary determination that authorization for these storm water discharges under the NPDES Phase I Storm Water Permit, SCS400001, is necessary to important economical or social development and that said authorization will allow maintenance of existing water uses. The Department is seeking comment on this preliminary finding. In accordance with Section D. (2), Antidegradation, of the State Water Quality Standards, this notice provides public participation and intergovernmental coordination for this decision.

### **Re-Authorization to Discharge under the Permit:**

Permittees submitted an application to be re-authorized to discharge under the SC NPDES Phase I Permit for Storm Water Discharges from the Town of Arcadia Lakes, the City of Forest Acres and Richland County, SCS400001, on March 11, 2011. Richland County is a regulated Phase I Medium MS4. Town of Arcadia Lakes and City of Forest Drive are small MS4 captured within the boundaries of the Columbia Urbanized Area, UA, since the U.S. 1990 census. The Standard Industrial Classification (SIC) Code best describing these applicants is: 9241, Administration of Environmental Programs.

Meaningful evaluation of the application package was performed as provided in FR 61, N°: 155, pp. 41698 & 9. Richland County has in place monitoring techniques other than end-of-pipe chemical specific monitoring. These techniques include, in addition to outfall wet weather sampling, water quality sampling and sediment, macro-invertebrate and dissolved oxygen (BOD<sub>5</sub> & NH<sub>3</sub>N) monitoring. The draft permit emphasizes SWMP elements to appropriately address authorized discharges and establishes suitable WQBEL to improve water quality. The Town of Arcadia Lakes, the City of Forest Acres and Richland County were first permitted under SCS400001 on April 16, 2000. EPA has reviewed the permit as drafted and confirmed concurrence on September 1, 2015. The draft will be the third permit cycle. There are at least sixty-five (65) major and one thousand three hundred (1,300) minor outfalls discharging from these MS4. The number of outfalls will be updated and reported periodically as required by the permit. The Department's preliminary determination to re-authorize the applicants to discharge under the draft permit is open for public comment. The draft permit, the public comment notice and this fact sheet can be seeing on the DHEC site:

<http://www.scdhec.gov/PublicNotices/>

Once a final decision is reached on the draft permit, the Town of Arcadia Lakes, the City of Forest Acres and Richland County storm water discharges will be re-authorized under the newly effective NPDES Phase I Permit SCS400001.

### **Reaching a Final Decision on the Draft Permit:**

The public comment period for the draft NPDES Phase I MS4 Storm Water Permit commences on September 11, 2015 and ends on October 12, 2015. Written comments will be accepted during this period. Written comments may be submitted to the attention of Mr. Arturo Ovalles

(Arturo.ovalles@dhec.sc.gov), SCDHEC, Bureau of Water, 2600 Bull Street, Columbia, SC 29201-1708.

Copy of the public comment notice has been mailed to the applicant, Federal and State agencies, stakeholders and interested parties. The public comment notice, this fact sheet and the draft NPDES permit are also available by visiting <http://www.scdhec.gov/PublicNotices/>. In addition, a public notice has been published in the Columbia Star, a weekly Columbia Newspaper with a certified readership of 27,858 in the Columbia UA.

All persons, including applicants, who believe any condition of the draft permit is inappropriate or that the Department's preliminary determination to authorize these storm water discharges under SCS400001 is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period.

Any supporting materials which are submitted shall be included in full and may not be incorporated by reference, unless they are already part of the administrative record in this proceeding, or consist of State or Federal statutes and regulations, Department and EPA documents of general applicability, or other generally available reference materials. Commenter shall make supporting materials not already included in the administrative record available.

Should a longer comment period than the one stipulated above be necessary to give commenter reasonable opportunity to raise issues and provide information during the public comment period, it is expected that commenter who may request additional time demonstrate the need for such time.

During the public comment period indicated above, any interested person may submit written comments on the draft NPDES permit and may request a public hearing. All comments shall be considered in making the final decision and shall be answered. All people commenting will receive a response to comments summary when DHEC reaches a permit decision. A request for a public hearing shall be made in writing and shall state the nature of the issues proposed to be raised in the hearing.

For other procedures for the public to participate in the final decision, visit

<http://www.scdhec.gov/Agency/BoardofDirectors/GuidetoBoardReview/>

Additional information regarding adjudicatory hearings is available from the Legal Office at the above Department address or by calling 803/898-3350.